Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-18. (cancelled)

19. (withdrawn) A method for extending a lifetime of a filament used in a fusion process, comprising:

disposing the filament in a second chamber which maintains an atmosphere that is substantially free of oxygen;

extending the filament into a first chamber for the fusion process; and

retracting the filament back into the second chamber after the fusion process.

20. (withdrawn) The method of claim 19, wherein the first chamber maintains an atmosphere that is substantially free of oxygen at least when the filament is extended into the first chamber.

21. (withdrawn) The method of claim 19, further comprising maintaining the first chamber at a higher pressure than ambient pressure at least when the filament is extended into the first chamber.

22. (withdrawn) A method for making microlensed fibers, comprising:

aligning a fiber and a rod made of lens material in a first chamber;

extending a filament from a second chamber which maintains an atmosphere that is substantially free of oxygen to the first chamber; and

fusion splicing the fiber to the rod and forming a lens from the rod using the filament.

23. (withdrawn) The method of claim 22, further comprising retracting the filament back into the second chamber after forming the lens.

24. (withdrawn) The method of claim 22, further comprising maintaining an atmosphere in the first chamber that is substantially free of oxygen at least when the filament is in extended into the first chamber.

25. (withdrawn) The method of claim 22, further comprising maintaining the first chamber at a higher pressure than ambient pressure at least when the filament is extended into the first chamber.

26. (withdrawn) The method of claim 22, wherein forming the lens from the rod comprises taper cutting the rod with the filament.

27. (withdrawn) The method of claim 26, wherein taper cutting comprises adjusting a position of the filament relative to the rod based on a thickness of a previous lens formed with the filament.

28. (withdrawn) The method of claim 27, wherein the position of the filament is adjusted such that a ratio of a thickness of the lens to a radius of curvature of the lens produced by the filament is substantially constant.

29. (new) An apparatus for fabricating a fiber-optic element, comprising:

a first chamber and a second chamber, the second chamber capable of maintaining an inert atmosphere;

a fiber holder for suspending a fiber for making the fiber-optic element inside the first chamber;

a filament supported inside the second chamber;

a barrier adjoining the first chamber and the second chamber, wherein the barrier is selectively operable to provide a passage between the first chamber and the second chamber; and

a positioning device for moving the filament between the second chamber and the first chamber when a passage is provided between the first chamber and the second chamber.

30. (new) The apparatus of claim 29, wherein the positioning device positions the filament to uniformly deliver heat to a portion of the fiber when the filament is in the first chamber.

31. (new) The apparatus of claim 29, wherein the positioning device is a translation stage, a y-z stage, an x-y-z stage, or an actuator.

32. (new) The apparatus of claim 29, wherein the first chamber is capable of maintaining an inert atmosphere at least around the filament when the filament is in the first chamber.

33. (new) The apparatus of claim 29, wherein one or more ports are provided in the first chamber for viewing an interior of the first chamber.

34. (new) The apparatus of claim 29, further comprising a second fiber holder for suspending a second fiber inside the first chamber in opposing relation to the fiber, wherein the filament when in the first chamber is positioned to uniformly deliver heat to a portion of the second fiber.

35. (new) The apparatus of claim 34, further comprising an optical sensor for detecting a gap between the fibers.

36. (new) An apparatus for fabricating a fiber-optic element, comprising:

a first chamber and a plurality of second chambers, the second chambers capable of maintaining an inert atmosphere;

a fiber holder for suspending a fiber for making the fiber-optic element inside the first chamber;

a filament supported inside the second chamber;

a barrier selectively adjoining the first chamber and a selected one of the second chambers, wherein the barrier is selectively operable to provide a passage between the first chamber and the selected one of the second chambers; and

a positioning device for positioning the filament in the first chamber when the passage is provided between the first chamber and the selected one of the second chambers.

37. (new) The apparatus of claim 36, wherein the second chambers are mounted on a rotatable member, the rotatable member allowing the second chambers to be rotated relative to the first chamber to allow the barrier to selectively adjoin the first chamber and a selected one of the second chambers.

38. (new) The apparatus of claim 36, wherein the positioning device positions the filament to uniformly deliver heat to a portion of the fiber when the filament is in the first chamber.

39. (new) The apparatus of claim 36, wherein the positioning device is a translation stage, a y-z stage, an x-y-z stage, or an actuator.